DIXON®

ZTR®

OPERATOR'S MANUAL

4500 SERIES

2003

IMPORTANT - READ CAREFULLY

The Dixon® ZTR® Mower is both easy and fun to operate. However, any power mower must be operated properly to be safe. It is not a toy or a recreational vehicle. Before you start to use the mower, read the operator's manual carefully and become completely familiar with the controls.

The information contained in this manual applies to all Dixon® ZTR® 4500 Series Mowers. Your Dixon dealer will gladly answer any questions.

See your dealer for warranty service, parts and repairs.

INDEX

Page

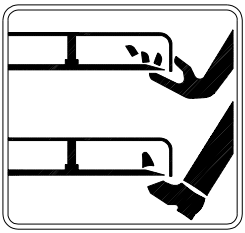
Safety. 4-11
Warranty Policy. 12
Specifications. 13
Seat Adjustment Instructions. 14
Controls. 15-17
Operation Instructions. 18-29
Care & Maintenance. 30-42
Standard Service Parts List. 43
Troubleshooting 44-45

4500 Series
Part No. 13633-0702

SAFETY

RIDING LAWN MOWERS,
IF IMPROPERLY OPERATED,
CAN CAUSE SERIOUS INJURY OR DEATH.

The most common causes of injury to the operator or bystander...



BLADE CONTACT

TIP OVER

RUN OVER

BACK OVER

...read and understand this manual to prevent injuries.

SAFETY

Safety Alert Symbol

When you see this symbol,
BE ALERT to the potential for injury.

Follow recommended safety precautions and safe operating practices.

DANGER
(highlighted in red)
indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING
(highlighted in orange)
indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION
(highlighted in yellow)
indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

SAFETY

Failure to observe the following safety instructions could result in serious injury or death.

GENERAL OPERATION:

- Read, understand, and follow all instructions in the manual and on the mower before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the mower.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop mower if anyone enters the area.
- NEVER carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Be aware of the mower discharge direction and do not point it at anyone.
- Do not operate the mower without either the entire grass catcher or the deflector in place.
- Slow down before turning.
- Never leave a running mower unattended. Always turn off blades, set parking brake, stop engine and remove key before dismounting.

SAFETY

GENERAL OPERATION (continued):

•Turn off blades when not mowing.

•Stop engine before removing grass catcher or unclogging chute.

•Mow only in daylight or good artificial light.

•Do not operate the mower while under the influence of alcohol or drugs.

•Watch for traffic when operating near or crossing roadways.

•Use extra care when loading or unloading the mower into a trailer or truck. Do not ride the mower when loading and unloading.

•Always wear safety goggles or safety glasses with side shields when operating mower.

•Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mower-related injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.

•Follow the manufacturer's recommendation for wheel weights and counterweights.

•Maintain/replace safety & instruction labels as needed.

WARNING: *The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.*

SAFETY

SLOPE OPERATION:

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death.

All slopes require extra caution.

If you cannot back up the slope or if you feel uneasy on it, do not mow it!

DO

- Mow across the slope with your Dixon ZTR - never up or down.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts or bumps. Uneven terrain could overturn the mower. Tall grass can hide obstacles.
- Use slow speed. Tires may lose traction on slopes even though the drive and/or brakes are functioning properly.
- Use extra care with grass catchers or other attachments. These can change the stability of the mower.
- Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly down the slope.
- If front wheels lift off the ground, pull the levers back to stabilize the mower.

DO NOT

- ***Do not*** turn on slopes unless necessary, and then, turn slowly and radually downhill, if possible.
- ***Do not*** mow near drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- ***Do not*** mow on wet grass. Reduced traction could cause sliding.
- ***Do not*** try to stabilize the mower by putting your foot on the ground.
- ***Do not*** use grass catcher on steep slopes.

SAFETY

CHILDREN:

Tragic accidents can occur if the operator is not alert to the presence of children.

Children are attracted to lawn mowers and the mowing activity.

NEVER assume children will stay where they were last seen.

Be alert to avoid accidents.

- Keep children out of the mowing area and under the watchful care of another responsible adult.

- Be alert and turn mower off if a child enters the area.

- Before and during backing, look BEHIND and DOWN for small children.

- Never carry children. They may fall off and be seriously injured or interfere with safe mower operation.

- Never allow children to operate the mower.

- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

SERVICE:

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.

  Use only an approved container.

  Never remove fuel cap or add fuel with engine running. Allow engine to cool before refueling.

  Do not smoke while refueling.

  Never refuel the mower indoors.

  Never store the mower or fuel container inside a building where there is an open flame.

  If fuel is spilled on clothing, change clothing immediately.

  To prevent fire and explosion caused by static electricity:

  Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.

  When practical, remove fuel-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a fuel dispenser nozzle.

  If a fuel dispenser nozzle must be used, keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.

SAFETY

SERVICE (continued):

- Never run a mower inside a closed area. The exhaust fumes are toxic.
- Keep nuts and bolts tight, especially blade attachment bolts, and keep equipment in good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep mower free of grass, leaves, or other debris buildup. Clean up oil or fuel spillage. Allow mower to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never make adjustments or repairs with the engine running unless otherwise specified.
- Grass catcher components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components & replace with original equipment parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Batteries contain sulfuric acid. To prevent burns avoid contact with skin, eyes and clothing. To prevent a fire or explosion keep sparks and open flames away from battery.
- Before disconnecting the negative (-) ground cable, make sure all switches are OFF.

DIXON LIMITED WARRANTY POLICY
RESIDENTIAL HYDRO

WARRANTY: **Home Owner Application:** Dixon ZTR Residential Hydro Units, used only at owner's primary place of residence are warranted for a period of two (2) years from date of purchase. **Commercial Application:** defined as use other than, or in addition to, mowing at owner's primary place of residence. Dixon ZTR Residential Hydro Units, used in commercial application are warranted for a period of 90 days from the date of purchase.

DIXON ZTR MOWERS ARE WARRANTED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP AND PROVIDES FOR REPLACEMENT OR REPAIR OF PARTS INCLUDING LABOR COSTS. THIS WARRANTY IS SUBJECT TO THE FOLLOWING CONDITIONS AND LIMITATIONS:

1. Warranty applies only to original retail purchaser of new and unused mowers and accessories.

2. All Dixon warranty must be accomplished by authorized Dixon dealers and in accordance with Dixon warranty policy and allowances. All warranty claims must be approved by Dixon Industries, Inc.

3. Battery warranty: Limited to 90 days from date of purchase.

4. Accessories Warranty (Grass Catchers, Snow Blades, Covers, etc.): Limited to 90 days from date of purchase.

5. Warranty does not apply to damage in transit or incidents of misuse, negligence, accidents, or alteration. The use of parts or components other than those supplied by Dixon Industries, Inc. VOIDS ALL WARRANTY.

6. The following items are not covered by this warranty policy:
   (a) Pick up and delivery charges for transportation of mower to and from an Authorized Dixon Dealer's place of business.
   (b) Routine maintenance or adjustments
   (c) Belts/Blades/Hydro filters
   (d) Engines – All engines used on Dixon ZTR mowers are warranted by each individual engine manufacturer.
   (e) Any costs or expense of providing substitute equipment while repair work is being performed on a warranted mower.

7. There is no other express warranty. Implied warranties, including those of merchant ability and fitness for a particular purpose, are limited to the same duration of the express warranty, and to the extent permitted by law any and all implied warranties are excluded. Liabilities for consequential damages under any and all warranties are excluded.

Copies: Pink/Customer **Yellow/Dealer** **White/Return to Dixon Ind.**

WARRANTY VALIDATION: At the time of sale, selling dealer must review each portion of this warranty document, complete the information section below, secure customer's signature and send copy to Dixon Industries, Inc.

Date of Purchase_____ Model _____ Deck Size_____ S/N _____

(Owner's Name)	(Dealership Name & Dealer Number)
(Street Address)	(Street Address)
(City/State/Zip)	(City/State/Zip)
(Owner's Signature)	(Dealer's Signature)

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DIXON ZTR Mowers

BLOUNT

SPECIFICATIONS

Model ZTR 4515, 4516 & 4518

CHASSIS:	Twin 12 gauge side frames, 7 gauge transmission & engine base plate.		
BODY:	All body parts made of high density polyethylene. Dent and corrosion resistant.		
MOWER DECK:	42" Deck: 13 GA Stamped Steel Construction-42" Cut Width 50" Deck: 11 GA Fabricated Construction/Reinforcement Ribs-50" Cut Width		
	Cut height approximately 1-1/2" to 4" via 7 position lift handle.		
BLADE DRIVE:	Electric clutch.		
TRANSMISSION:	Each rear wheel is independently driven by a HydroGear IZT hydrostatic drive.		
ENGINES:			
Model 4515:	15.5 HP Briggs & Stratton Vanguard, 4-Cycle, Single Cylinder, Overhead Valve, Air-Cooled, Gasoline, Vertical Shaft with Cast Iron Cylinder Sleeve, Full pressure lube with spin-on filter		
Model 4516:	16 HP Kohler Command 460 cc, Single Cylinder, Overhead Valve, Air Cooled, Gasoline, Pressure Lubricated with oil filter, Vertical Shaft, Aluminum Head and Block with Cast-Iron Cylinder Liner.		
Model 4518:	18 HP Kohler Command Twin Cylinder, Overhead Valve, Air Cooled, Gasoline, Pressure Lubricated with oil filter, Vertical Shaft, Aluminum Head and Block with Cast-Iron Cylinder Liner.		
STARTING SYSTEM :	Electric by key switch operation with safety interlock blade drive.		
TIRES:	Front	11 x 4.00 x 5 ribbed tread	
	Rear	18 x 8.50 x 8 Turf Trac R/S	
RECOMMENDED TIRE PRESSURE:	Front	16-21 PSI	
	Rear	8-14 PSI	
CAPACITIES:	Fuel	2.7 gallons total	
	Engine	B&S - 1.5 quarts	Kohler - 2 quarts
DIMENSIONS:	Width	44" maximum track width	
	Height	42" to top edge of seat	
	Length	72" hitch tab to front bumper	
	Weight	Power Unit:	463 lbs.
		w/42" Deck:	547 lbs.
		w/50" Deck:	603 lbs.

Additional information provided in service instructions under the individual component.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

SEAT ADJUSTMENT INSTRUCTIONS

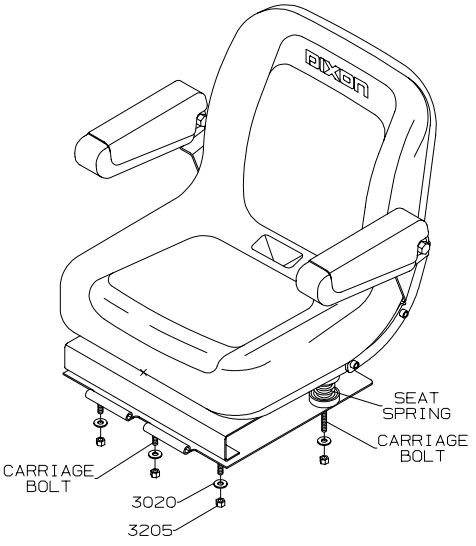
Model ZTR 4515, 4516 & 4518

1. Raise and push seat assembly forward.

2. Loosen five nuts and slide seat forward or backward to desired position.

3. Re-tighten nuts. DO NOT operate mower without seat adjustments properly tightened.

4. Push seat assembly back to closed position.



CONTROLS

CONTROL LEVERS

Note: For access to the seat, move control levers to neutral position and swing them outward.

TO GO FORWARD:

- From neutral position, gently push both control levers forward.
- To increase speed, move levers further forward.

TO GO BACKWARD:

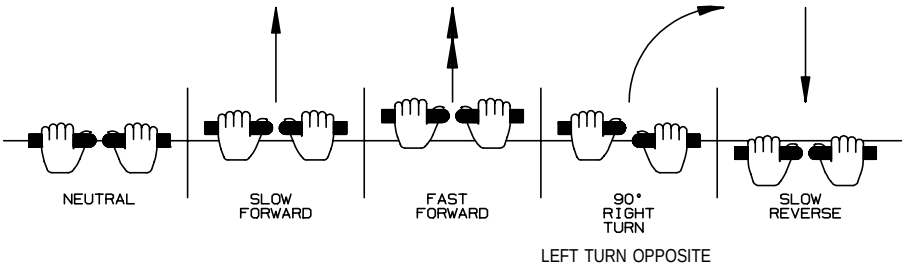
- From neutral position, gently pull both control levers toward you.

TURNING:

- Turning is controlled by moving one control lever slightly forward or rearward of the other.
- To turn left, move left lever rearward of the right lever.
- To turn right, move right lever rearward of the left lever.
- To turn on mower's own axis (zero turning radius), stop and move one lever to reverse position and the other to forward position.

BRAKING:

- To brake mower, move both levers in direction opposite of travel.



Note: The pressure required to operate the mower is very light.

CONTROLS

PARKING BRAKE:

The parking brake is designed to hold the mower from moving and is not intended for use in stopping the mower while it is in motion. The engine will stop if the parking brake is engaged while the control levers are in the drive position.

CAUTION Engage parking brake before starting engine.

TO SET PARKING BRAKE:

The hand operated parking brake is located on the right fender.

To engage brake, pull lever up (to the rear).

To release brake, move lever forward (down).

NOTE: Always set parking brake before dismounting. Release parking brake before moving mower.

TRANSMISSION DRIVE SYSTEM

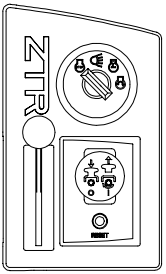
Allows the mower to turn on its own axis "ZERO TURNING RADIUS". Each lever controls one side of the mower.

NOTE: The pressure required to operate the mower is very light.

CONTROLS

BLADE DRIVE:

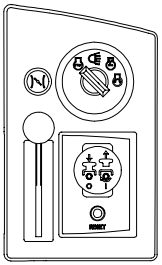
- Located on the control panel, on operator's right.
- To engage the mower blade, pull up on the switch.
- To disengage mower blade, push down.



4515 & 4516

CIRCUIT BREAKER :

- Protection of the electrical system is by (1) 15 amp circuit breaker.
- If circuit breaker trips, push button to reset.
- If this condition repeats, consult dealer for inspection and repair.



4518

THROTTLE CONTROL LEVER :

- Located on control panel to operator's right.
- Throttle control for engine speed.
- Choke for engine starting (omit for 4518).
- Throttle control should be set to MAXIMUM or wide open setting to insure adequate cooling of the engine and to maintain mower deck blade speed while mowing.

CHOKE CONTROL (4518 only):

- Located on control panel to operator's right.
- Choke for engine starting.

MOWER DECK CUT HEIGHT LIFT LEVER:

- Located to the left of the operator.
- Controls the cutting height.
- Seven positions of adjustment.
- Move lever in and forward to lower.
- Move lever in and back to raise.

NOTE: Always use high for transport.

OPERATION INSTRUCTIONS

The safe and successful operation of the 4500 Series will depend upon the operator having the correct knowledge of all controls used on the mower and making good judgements about the terrain to be mowed.

NEVER allow anyone to operate the mower without complete knowledge of all controls and their functions.

During initial operation, "learning to drive", set throttle at slow speed.

Sound judgement by the operator will prevent accidents.

BEFORE OPERATING MOWER:

1. Read engine manufacturer's operating and maintenance instructions.
2. Read and observe all safety instructions on your mower and in the manual.
3. Check engine oil.
4. Check fuel cap to be sure it is in place.
5. Be sure parking brake is on.
6. Be sure mower blade drive is off.
7. Know how to stop engine. (Turn key to off position).

OPERATION INSTRUCTIONS

TOWING TRAILERS AND OTHER ATTACHMENTS:

Towing a trailer or other attachment that is too heavy could damage the drive or cause the mower to become unstable. Limit loads to 250 pounds or less with this mower.

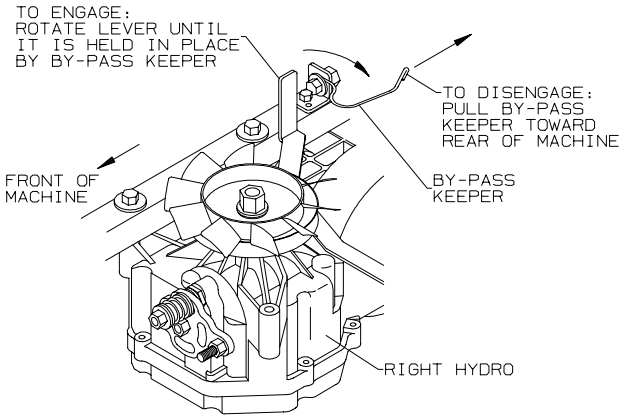
TO FREE WHEEL MACHINE (Unlock Transmission):

Always turn off engine before engaging or disengaging the hydro release (free wheel) lever. Never attempt to move the lever with the engine running.

Rotate the hydro release lever (on top of right hydro) until it is held in place by the by-pass keeper. Release parking brake.

To engage the transmission, pull by-pass keeper, toward rear of machine so hydro release lever returns to its normal position.

NOTE: Before pushing or towing tractor, transmission must be unlocked and parking brake released. The tractor should never be pulled at more than 2 miles per hour or for any appreciable distance.



OPERATION INSTRUCTIONS

TESTING OF SAFETY INTERLOCK SYSTEMS:

PARKING BRAKE SWITCH TEST:

a) Swing out control levers
b) Disengage blade drive switch
c) Put parking brake in OFF position
d) Turn ignition switch to START

Engine should not turn over or attempt to start.

CONTROL LEVER SWITCH TEST:

a) Disengage blade drive switch
b) Put parking brake in ON position
c) Swing control levers in
d) Turn ignition switch to START

Engine should not turn over or attempt to start.

OPERATION INSTRUCTIONS

TESTING OF SAFETY INTERLOCK SYSTEMS:

BLADE DRIVE SWITCH TEST:

a) Put parking brake in ON position
b) Swing out control levers
c) Engage blade drive switch
d) Turn ignition switch to START

Engine should not turn over or attempt to start.

SEAT SWITCH TEST:

a) In a SAFE AREA away from bystanders, start the engine
b) Leave levers swung out and parking brake ON
c) Engage blade drive
d) Raise slightly off seat

ENGINE SHOULD STOP!

NOTE: ***If Any Safety Check FAILS, Do Not Operate The Mower until the system has been checked and repaired by an Authorized Dixon Dealer.***

OPERATION INSTRUCTIONS

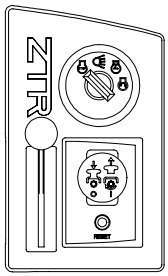
CAUTION Engage parking brake before starting engine.

STARTING INSTRUCTIONS (4515 & 4516):

1. Parking brake must be on, control levers swung out, and blade drive disengaged.
2. Move throttle control to "choke" position if engine is cold, full throttle if warm.
3. Insert ignition key and turn to "start" position. When engine starts, release ignition key. Key will return to "run" position.
4. Move throttle from "choke" to desired speed position.
5. Release parking brake.
6. Swing levers in.
7. Operate the mower per the "CONTROL" instructions on Page 15.

CAUTION Do not operate the engine in an enclosed area due to the harmful exhaust gas produced.

Note: When mowing, "blade(s) engaged", throttle control must be set to the MAXIMUM or wide open setting to insure adequate cooling of the engine and to maintain mower deck blade speed.



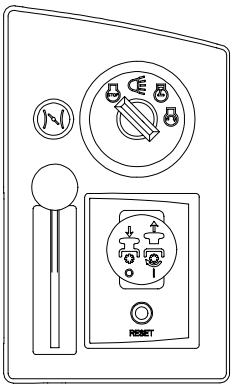
OPERATION INSTRUCTIONS

STARTING INSTRUCTIONS (4518):

1. Parking brake must be on, control levers swung out, and blade drive disengaged.
2. Engage choke to full position if engine is cold, full throttle if warm.
3. Insert ignition key and turn to "start" position. When engine starts, release ignition key. Key will return to "run" position.
4. Move throttle to desired speed position.
5. Release parking brake.
6. Swing levers in.
7. Operate the mower per the "CONTROL" instructions on Page 15.

CAUTION Do not operate the engine in an enclosed area due to the harmful exhaust gas produced.

When mowing, "blade(s) engaged", throttle control must be set to the MAXIMUM or wide open setting to insure adequate cooling of the engine and to maintain mower deck blade speed.



4518

OPERATION INSTRUCTIONS

SIDE DISCHARGE OF THE CLIPPINGS:

In order to achieve optimum performance when side discharging the grass clippings, please read and follow the tips listed below. Additional information can be found in the troubleshooting guide.

CAUTION Be sure that the deflector is properly installed on the discharge chute.

1, Set engine speed control to the wide open or full setting.

2. *Do Not Attempt To Cut Grass When It Is Wet.* Wet grass will clog the underside of the deck and discharge area.

3. If the grass is tall, place the mower deck cut height lever in the top or second notch. "Initially" overlap cutting swaths instead of a full swath with each pass. Some applications may require a second cutting.

4. *Keep The Underside Of The Mower Deck Clean.* Frequent removal of dried grass and dirt will allow the clippings to discharge correctly.

5. Maintain Sharp Blade(s) Throughout The Cutting Season.

OPERATION INSTRUCTIONS

GRASS HEIGHT AND CUTTING SUGGESTIONS:

Do not attempt to cut grass when it is wet.

If the grass is tall, place the mower deck cut height lever in the top or second notch. "Initially" overlap cutting swaths instead of a full swath with each pass. Some applications may require a second cutting.

Keep the underside of the mower deck clean.

Maintain sharp blades throughout the cutting season.

As a rule of thumb, never cut off more than 1/3 of the total grass blade length. Correct mowing height can reduce weeds and disease by 50% to 80%.

The following grass cut heights are based an adequate moisture conditions and normal thatch buildup in a healthy lawn. Some locations and applications may require slightly different cut heights. If in doubt, consult your local lawn professional for assistance.

Grass Types	Best Cut Heights
Bermudagrass	1 - 2"
Bluegrass	2 - 3"
Buffalograss	$1^{1/2}$ -3"
Ryegrass	2 - 3"
Tall Fescue	$3\text{-}3^{1/2}$"
Zoysiagrass	1 - 3"

OPERATION INSTRUCTIONS

MOWING WITH A MULCHING ATTACHMENT:

Mulching or recycling the grass clippings requires a totally different mowing approach than would be normal when side discharging or bagging the grass. There may be instances or conditions where it is not possible to hide all of the recycled or mulched clippings.

In order to achieve the best results, please read and follow the mulching tips listed below:

1. Set the engine speed control to the wide open or full setting.

2. Place the mower deck cut height selector in either the top or second notch. Never cut more than 3/4" to 1"off the grass at any one time. Attempting to cut more grass will result in the deck plugging and cause the engine to stall.

3. It may be necessary to cut the lawn twice to achieve acceptable mulching performance especially on first cuttings or if the lawn is heavily fertilized.

4. *Do Not Attempt To Cut Grass When It Is Wet.* Mulching performance will be very poor under wet grass conditions.

5. *Maintain Sharp Blade(s) Throughout The Cutting Season.* This is very important. Optimal mulching performance cannot be obtained with a dull or nicked up blade.

OPERATION INSTRUCTIONS

MOWING WITH A MULCHING ATTACHMENT (continued):

6. *Keep the Underside Of The Mower Deck Clean.* Remove all grass and dirt build-up from the underside of the pan, the baffles and deflectors after each use.

7. Alternate mower direction. This will evenly disperse the mulched grass clippings over the lawn for even fertilization.

   If the mulching quality of the mower does not seem to be satisfactory, try one or more of the following tips:

   a. Raise the height-of-cut setting on your mower.

   b. It may be necessary to cut your grass more frequently.

   c. Operate the mower at a slower ground speed.

   d. Overlap cutting swaths instead of cuttinga full swath with each pass.

   e. Mow across the marginal areas a second time.

   f. CUT HIGH - MOW OFTEN!

OPERATION INSTRUCTIONS

MOWING WITH A GRASS CATCHER ATTACHMENT:

In order to achieve optimum performance when mowing with a grass catching attachment, please read and follow the tips listed below.

1. Set engine speed control to the wide open or full setting.

2. *Do Not Attempt To Cut Grass When It Is Wet.* Wet grass will clog both the underside of the deck and the attachment chutes. Empty bags often to prevent plugging.

3. If the grass is tall, place the mower deck cut height selector in the top or second notch. "Initially" overlap cutting swaths instead of a full swath with each pass.

4. *Keep The Underside Of The Mower Deck Clean.* Frequent removal of dried grass and dirt will greatly assist in bagging of the clippings.

5. *Maintain Sharp Blade(s) Throughout The Cutting Season.* Some grass catching attachments require a "high-lift" blade. See your dealer for advice on the type of blade(s) needed for your mower.

6. Operate the mower at a slower ground speed than when mowing without a grass catching attachment.

OPERATION INSTRUCTIONS

MOWING WITH A GRASS CATCHER ATTACHMENT (continued):

7. Some mowing applications/use of grass catchers may require that an optional weight box be fitted to the mower to counter the weight of grass in the bags. Please consult with your dealer for more information regarding installation and adding weight to the box.

CAUTION

- Watch for low hanging branches or other obstacles which might hit the catcher top while turning or backing the mower.
- Use care when backing to avoid pushing the grass bags into the frame or "hot" exhaust muffler of the engine.
- Disengage blade and stop engine prior to clearing grass from either the discharge chute or grass catcher components.
- Keep all attachment bolts tight.
- *Do Not* operate the mower with the grass catching attachment partially removed.
- *Important:*

Do Not leave clippings in the bags while the mower is stored. Damp grass clippings are a fire hazard if left in the bag.

CARE AND MAINTENANCE

⚠ CAUTION

Before performing any maintenance, turn off engine, allow to cool & remove key.
Use extreme care when working on machinery.
Do not wear watch or jewelry. Do not wear loose fitting clothes, and observe all common safety practices with tools.

MAINTENANCE SCHEDULE

- Check deck serpentine belt.....after 20 hours break-in
- Check crankcase oil level.....before each use
- Clean grass & debris from muffler & manifold area.....before each use
- Check air intake screen.....after each use
- Clean grass under deck.....after each use
- Check tire pressure.....every 10 hours
- Inspect blades for sharpness.....every 10 hours
- Clean air filter element.....every 25 hours
- Grease all zerks.....every 50 hours
- Check all belts.....every 50 hours
- Change engine crankcase oil (Kohler engine).....(5 hours break-in) every 100 hours
- Change engine oil filter (Kohler engine).....every 100 hours
- Change engine crankcase oil (B&S engine).....(5 hours break-in) every 50 hours
- Change engine oil filter (B&S engine).....every 50 hours
- Replace air filter element.....annually or every 100 hours

CARE AND MAINTENANCE

ENGINE:

For complete maintenance and operating information of the engine, please refer to the maintenance instructions furnished by the engine manufacturer and included in your Zero Turn Radius mower information packet.

BATTERY:

CAUTION ***Battery contains sulfuric acid electrolyte which is poisonous and corrosive.***

•This is a maintenance-free battery and the fluid level cannot be checked.

•Charge battery if required.

OFF SEASON BATTERY STORAGE:

•DO NOT remove battery from mower.

•Clean top of battery and terminals with baking soda and water.

•Identify each cable so they can be reconnected to the correct terminal.

•Disconnect cables from terminals. ALWAYS disconnect ground cable first and reconnect last.

•Charge battery.

TIRES:

Correct tire pressure is essential for efficient operation of the mower. Check tire pressure periodically. Inflate tires to the pressure listed below.

Front tires	11 x 4.00 X 5	16-21 lbs.
Rear tires	18 x 9.50 x 8	8-14 lbs.

Lug nuts or lug bolts should be checked regularly for tightness.

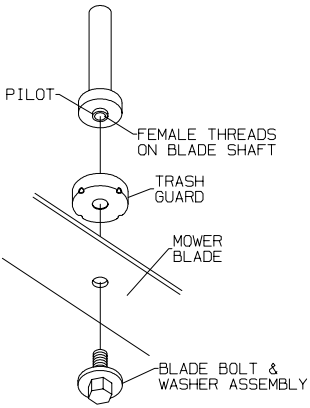
CARE AND MAINTENANCE

CUTTER BLADE MAINTENANCE:

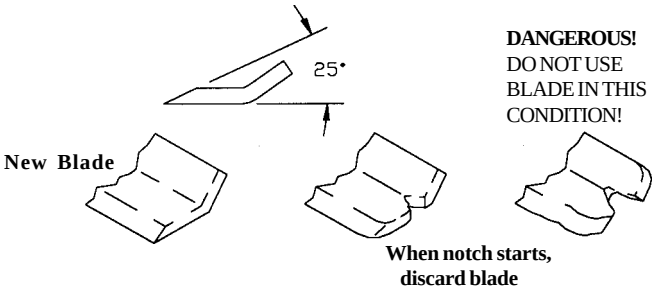
CAUTION Stop engine and remove ignition key for safety. Wear heavy, thick gloves when holding onto cutter blade, avoid the sharp edge of the blade.

Check sharpness of mower blades after every 10 hours of operation. Observe proper blade position prior to removal.

1. Safely raise front of mower.
2. Hold or block blade from turning.
3. Loosen blade nut and remove blade.
4. When replacing blade, tighten blade nut securely. Refer to diagram. Be sure blade is centered on pilot before tightening nut to 60 ft. lbs.



Blades should be discarded when worn excessively.



CARE AND MAINTENANCE

BELTS:

Check belts every 50 hours. Replace any belts found to be in poor condition.

BELT TENSION:

42" Deck: **Mower Deck Serpentine Belt** **P/N 6109**

Manual adjustment. Refer to illustration below.

Engine to Mower Deck Belt: **P/N 5861**

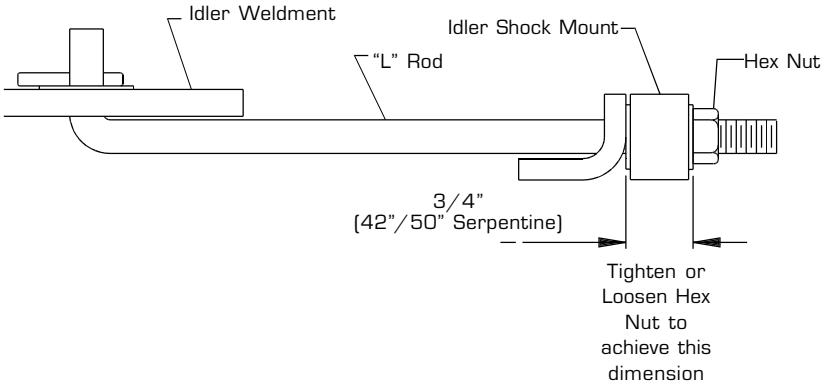
Auto tensioner with spring loaded idler. No adjustment required.

50" Deck: **Mower Deck Serpentine Belt:** **P/N 1300**

Manual adjustment. Refer to illustration below.

Engine to Mower Deck Belt: **P/N 7174**

Auto tensioner with spring loaded idler. No adjustment required.



CARE AND MAINTENANCE

NEUTRAL ADJUSTMENT

DRIVE MACHINE UNTIL HYDROSTATS HAVE WARMED UP. WITH ENGINE RUNNING AND THE PARKING BRAKE OFF, SWING OUT THE CONTROL LEVERS. IF MACHINE STARTS TO CREEP, FOLLOW THE INSTRUCTIONS BELOW.

1. Stop the engine, engage parking brake and raise rear of frame with jack or blocks so that rear tires do not contact the ground.

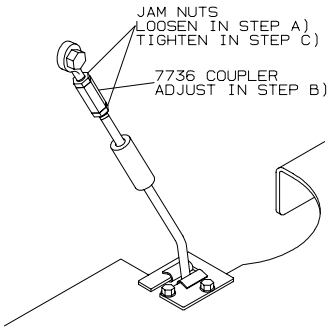
2. Swing out the control levers, start the engine and release the parking brake.

3. Raise the seat to access hydro control linkage. If right wheel creeps, adjust right side linkage and vice-versa. Use procedure below.

    a. Loosen jam nuts on ends of the coupler P/N 7736.

    b. If right wheel is creeping forward, turn coupler counter-clockwise until neutral is achieved (clockwise for left side). If right wheel is creeping backward, turn coupler clockwise until neutral is achieved (counter-clockwise for left side).

    c. Tighten jam nuts against coupler.

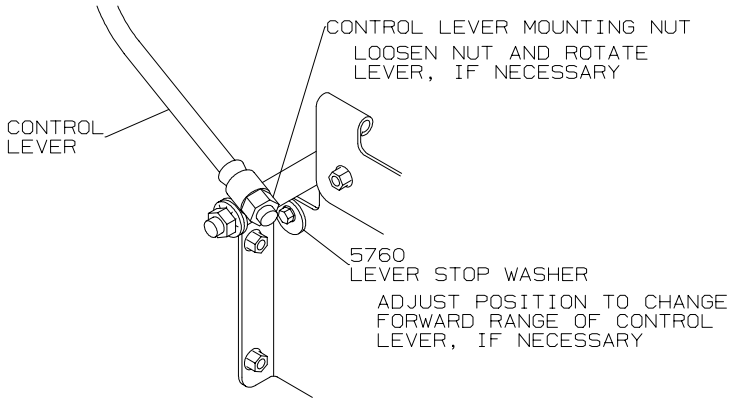


CARE AND MAINTENANCE

NEUTRAL ADJUSTMENT (continued)

4. Stop engine and remove rear of machine from jack or blocks.

5. Drive machine with both levers in top speed position. If one side now drives slightly faster than the other, adjust lever stop washer P/N 5760 on that side to reduce forward range of control lever. If levers are now uneven at top speed, loosen control lever mounting nut. Rotate lever to be even with other side and tighten nut.


CONTROL LEVER MOUNTING NUT
LOOSEN NUT AND ROTATE LEVER, IF NECESSARY
CONTROL LEVER
5760
LEVER STOP WASHER
ADJUST POSITION TO CHANGE FORWARD RANGE OF CONTROL LEVER, IF NECESSARY

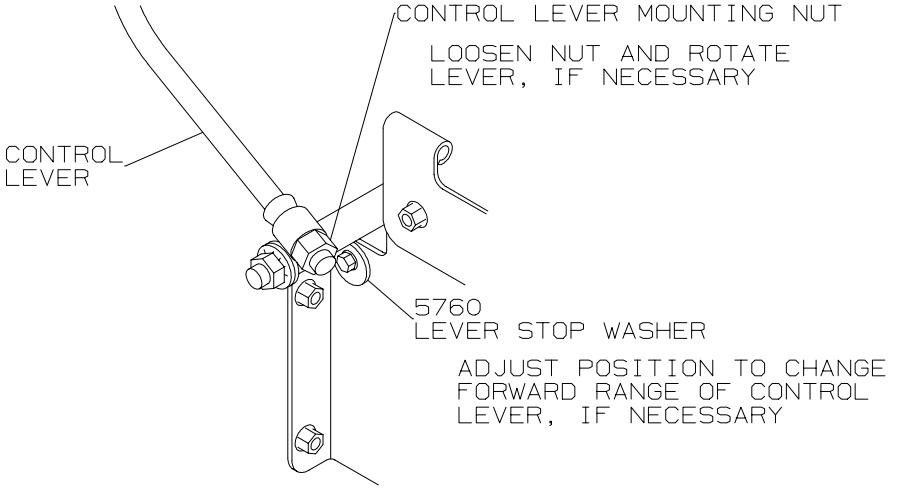
CARE AND MAINTENANCE

FORWARD TRAVEL SPEED ADJUSTMENT

1. Drive machine until hydrostats have warmed up.

2. Drive on a smooth, level surface with both levers in top speed position.

3. If one side now drives slightly faster than the other, adjust lever stop washer P/N 5760 on that side to reduce forward range of control lever. If levers are now uneven at top speed, loosen control lever mounting nut. Rotate lever to be even with other side and tighten nut.


CONTROL LEVER MOUNTING NUT
LOOSEN NUT AND ROTATE LEVER, IF NECESSARY
CONTROL LEVER
5760
LEVER STOP WASHER
ADJUST POSITION TO CHANGE FORWARD RANGE OF CONTROL LEVER, IF NECESSARY

CARE AND MAINTENANCE

MOWER DECK LEVELING PROCEDURE:

1. Place mower on a smooth, level surface and check tire pressures to insure correct stance. Tires should be inflated as follows.
   Front: 16 - 21 lbs
   Rear: 8 - 14 lbs

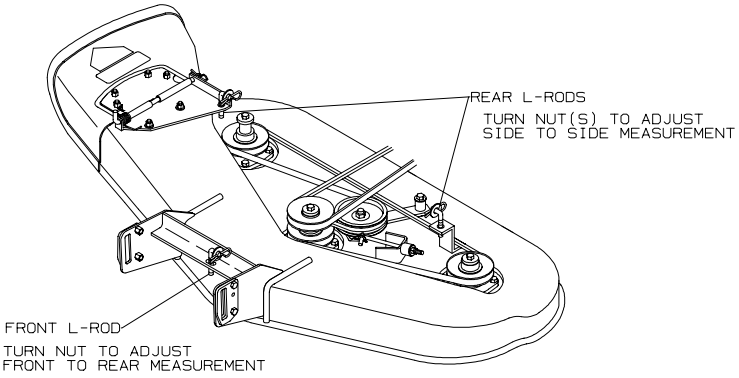
2. Turn each outer blade tip to align with the deck in a side to side manner.

3. Measure from the floor surface up to the bottom of the blade tip on the discharge side of the mower. Retain this measurement. Move to the opposite side and check to see if that measurement is the same. *If adjustment is required, turn nut on one or both of the rear L-rods until both measurements are equal.*

4. Turn each outer blade tip to align with the deck in a front to rear manner.

5. Measure from the floor surface up to the bottom of the blade tips at *both the front and rear of the blades.* Rear of blade tips should be to 1/8" to 3/8" higher that the front of blade tips. If adjustment is necessary, turn nut on front L-rod.

NOTE: This will place the mower deck in a base measurement position. Additional adjustment may be required to achieve desired cut for the type of grass or conditions involved.



CARE AND MAINTENANCE

DECK REMOVAL:

1. Place cut height lever in lowest cut position.

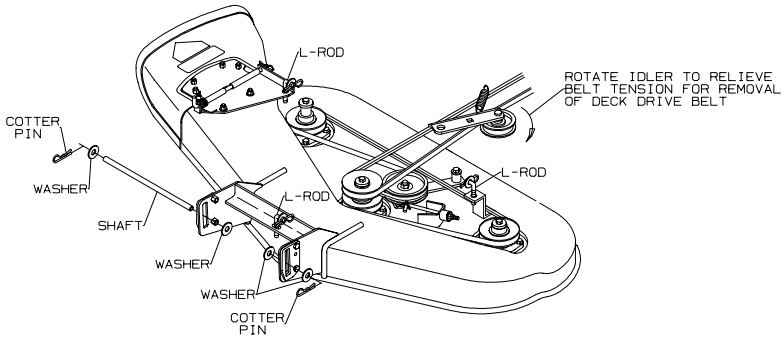
2. Pull belt idler back to allow belt to be removed from idler pulley and electric clutch pulley.

3. Remove hair pin cotter and washer from one end of deck support cross shaft. Note location of remaining shim washers used between chassis and mower deck plates. Slide shaft from chassis and mower deck.

4. Remove hair pin cotter and washer from each deck L-rod. Remove L-rods from lift arms. At this point, deck will drop down.

5. Carefully raise and support front of chassis. Slide mower deck to either side for removal. (Reverse procedure to reinstall deck assembly.)

NOTE: When deck is reinstalled on frame, check that belt is correctly routed in the grooves of all pulleys and that belt idler is applying tension to the back side of the belt.



CARE AND MAINTENANCE

CAUTION HOT oil may cause burns. Allow engine to cool before draining oil.

CHANGING THE ENGINE OIL:

1. The "Dapco" oil drain valve is located on the left side of the engine crankcase (Model 4515 & 4518) and on the right side of the engine crankcase (Model 4516).

2. Place a suitable container under the drain valve hose.

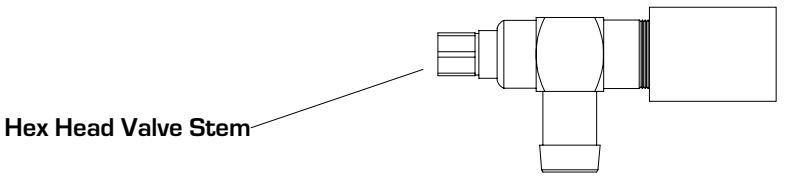
3. To drain, turn hex head valve stem counter–clockwise with a 10mm wrench or socket. Open to full open (approximately 7 turns).

4. After engine is drained, tighten hex stem.

5. Change oil filter.

6. Fill with oil (see steps on next page).

NOTE: Refer to engine manufacturer's recommendations for frequency of oil changes.



CARE AND MAINTENANCE

CAUTION HOT oil may cause burns. Allow engine to cool before draining oil.

OIL FILL:

1. Clean any spilled oil from engine and chassis.

2. Refill engine with type, and quantity of oil recommended by the engine manufacturer in engine literature.

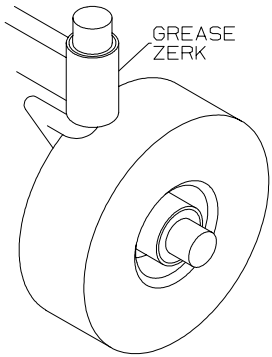
NOTE: Engine oil changes on the 4500 Series Models will require replacement of the oil filter. These filters can now be obtained from any authorized Dixon Dealer.

PLEASE DISPOSE OF USED OILS AT PROPER COLLECTION CENTERS. PROTECT YOUR ENVIRONMENT.

CARE AND MAINTENANCE

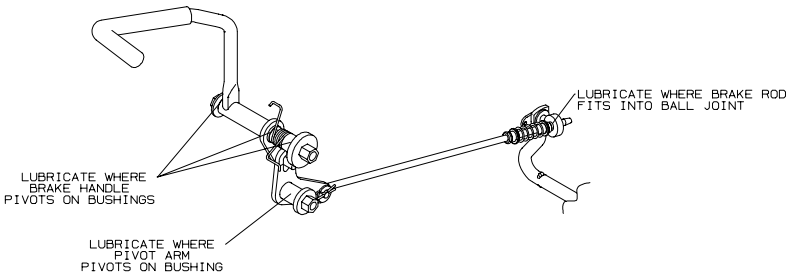
LUBRICATION:

CHASSIS:	(5) grease zerks
LOCATIONS:	(1) each front wheel caster (1) each mower deck hub
SERVICE INTERVALS:	Every 50 hours of operation
RECOMMENDED GREASE:	Name brand wheel bearing or multi-purpose grease. Once per season or 50 hours of operation(3 pumps each)



BRAKE SYSTEM:

Use penetrating lubrication to keep all brake parts functioning smoothly. Lubricate at locations illustrated.


LUBRICATE WHERE BRAKE ROD FITS INTO BALL JOINT
LUBRICATE WHERE BRAKE HANDLE PIVOTS ON BUSHINGS
LUBRICATE WHERE PIVOT ARM PIVOTS ON BUSHING

CARE AND MAINTENANCE

ELECTRICAL SYSTEMS:

Keep all connections clean and tight.

CLEANING THE MOWER:

Wash mower periodically. Clean above and below deck.

High pressure washing and alkaline based soaps can cause damage to bearings and other parts of the mower. After washing your mower, start the engine and engage the mower deck for a few minutes to disperse any water that may have accumulated in bearings, pulleys or fans.

Note: Allow mower to cool before washing. If bearings are hot, they will draw moisture inside as they dry and cause corrosion.

SERIAL NUMBERS:

The serial number is located on frame at rear of engine.

WARRANTY:

Refer to Warranty Registration Form (copy on page 12).

PARTS/SERVICE:

See your Dixon dealer for replacement parts, warranty or service.

PLEASE HELP PROTECT THE ENVIRONMENT BY AVOIDING ALL CHEMICALS WHICH MAY DAMAGE OR CAUSE HARM TO PLANTS AND ANIMALS IN YOUR AREA.

STANDARD SERVICE PARTS LIST

42" Deck:

Blades: Standard (Hi-Lift) - P/N 8688
Lo-Lift - P/N 6236

Belts: Engine to Mower Deck - P/N 5861
Serpentine - P/N 6109
Engine to Transmission - P/N 5768

50" Deck:

Blades: Standard (Hi-Lift) - P/N 9444
Lo-Lift - P/N 9443

Belts: Engine to Mower Deck - P/N 7174
Serpentine - P/N 1300
Engine to Transmission - P/N 5768

BRIGGS & STRATTON AIR AND OIL FILTER PART NUMBERS:

Refer to Briggs & Stratton Engine Operator's Manual for correct service intervals for engine oil changes and air filter maintenance.

Protect your engine investment, use only original equipment filters.

Air Filter & Pre-Cleaner Kit - P/N 79002 (4515)
Engine Oil Filter - P/N 79006 (4515)

KOHLER AIR AND OIL FILTER PART NUMBERS:

Refer to Kohler Engine Operators Manual for correct service intervals for engine oil changes and air filter maintenance.

Protect your engine investment, use only original equipment filters.

Air Filter & Pre-Cleaner - P/N 78001(4516)
Air Filter & Pre-Cleaner - P/N 78002 (4518)
Engine Oil Filter - P/N 78006 (4516 & 4518)

TROUBLESHOOTING

1. ENGINE WON'T TURN OVER

Mower blades engaged- -disengage blades
Parking brake not on- - - - - - - - - - - - - - - - - - - -engage parking brake
Circuit breaker trips- -reset breaker
Dead battery- charge or replace
Solenoid- -consult dealer
Ignition switch- -consult dealer
Starter- -consult dealer

2. ENGINE WILL TURN OVER BUT WON'T START

No fuel- - - - - - - - - - - - - - - refuel and/or clean or replace fuel filters

3. HARD TO START ENGINE

Fuel line clogged- - - - - - - - - - - - - clean fuel line and check fuel filter
Faulty fuel pump- -consult dealer

4. ENGINE STARTS BUT CUTS OUT

Water in fuel- - - - - - - - - - - - - - - -drain old fuel-replace with new fuel
Clogged fuel line- -check fuel filter
Fuel tank vent plugged- -clean fuel vent
Faulty fuel pump- check vent

5. ENGINE OVERHEATED

Air intake screen or fins clogged- - - - - -clean intake screen and fins
Oil level too low or too high- adjust oil level
Running engine too slow -run engine faster

TROUBLESHOOTING

6. ENGINE RUNS BUT MOWER WON'T MOVE FORWARD

Drive belt broken or slipping- replace drive belt
Transmission oil low- add oil
Bad transmission- consult dealer
Transmission by-pass may be on- - - - - - - - - - - -turn off (see page 19)

7. MOWER LOSES POWER OR TRANSMISSION OVERHEATS

Engine air filter– -clean or replace
Transmission damage- consult dealer
Transmission blowing oil out cap - - -overfilled/water contaminated

8. ENGINE STALLS WHEN BLADES ARE ENGAGED

Operator not on seat- -sit on seat
Faulty interlock system- consult dealer
Bad blade spindle bearing -consult dealer
Deck drive belt not properly routed- reroute
Blades blocked by foreign material - - - - - - - - - - - - - -clean under deck

9. DRIVE SYSTEM

Mower pulls to side- - - - check tire inflation/adjust control linkage
Mower creeps in neutral- -adjust control linkage
Low on power- check belt tension

10. CUT QUALITY

Cut uneven left to right- - - - - - - - - - - - - check tire inflation/level deck
Ends of grass blades are ragged- - - - - - - - - - - - - - - - - - -sharpen blades
Poor dispersal of grass- - - - - - - - - - -clean deck/check for loose belt
Skips in spots- - - - - - - - - - - - check for loose belt/slow ground speed

NOTES

OWNER INFORMATION

DIXON INDUSTRIES, INC.
a BLOUNT International Inc. Co.
P.O. Box 1569
Coffeyville, Ks 67337-0945
620-251-2000
FAX 620-251-4117

Date Purchased _____

Mower Model Number _____

Mower Serial Number _____

Purchased From _____

Name

_____

Address

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DATE OIL CHANGED:

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DATE ENGINE TUNED:

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ZTR®Mowers

WARNING: *The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.*

Dixon® and ZTR® are registered trademarks of
Dixon Industries, Inc.

DIXON INDUSTRIES, INC.
a BLOUNT International Inc. Co.
P.O. Box 1569
Coffeyville, Ks 67337-0945
620-251-2000

4500 Series
4515, 4516 & 4518
Part No. 13633-0702